S-300V

Air Defence Missile System

Mission

The S-300V air defence missile system is designed to provide air defence of task forces and key military and state installations against mass attacks by theatre and tactical ballistic missiles, aeroballistic and cruise missiles, strategic and tactical aircraft, as well as to engage loitering ECM aircraft and other air strike assets.

The S-300V system is a mobile multi-channel long-range surface-to-air missile system. It can provide effective theatre missile and air defence.

Basic specifications	
Max target detection range, km	up to 250
Aerodynamic target engagement envelope, km:	
range	up to 100
altitude	0.025 – 30
Ballistic target engagement range, km	up to 40
Max target speed, m/s	3,000
Target radar cross section, sq. m	0.05 +
Max hostile ballistic missile launch range, km	1,100
Number of simultaneously engaged targets	up to 24
Number of simultaneously guided missiles	up to 48
Missile launch preparation time, sec	15
Into/out-of-action time, min	5
ADMS continuous operation time, hrs	up to 48

The system has high jamming immunity, and therefore is capable of engaging aerial targets in heavy ECM and fire counteraction, in any weather, by day and night.

Composition

A typical S-300V system structure includes:

- target detection and designation unit;
- up to four SAM systems;
- missile support and technical maintenance assets.

The target detection and designation unit includes:

- 9S457-1 command post;
- 9S15MV (9S15MT) all-round surveillance radar;
- 9S19M2 sector-surveillance radar.

Each SAM system typically includes:

- 9S32-1 multi-channel missile guidance radar;
- up to six launchers in two variants: 9A83-1 with four 9M83 missiles in transport-launch containers and 9A82 with two 9M82 missiles in each TLC;
- up to six loader/launchers in two variants:

9A84 with four 9M83 SAMs in TLC, and 9A85 with two 9M82 SAMs in each TLC.

A typical ADM system, consisting of four 9A83-1 launchers, four 9A84 loader/launchers, two 9A82 launchers and two 9A85 loader/launchers, has ammunition allowance of 32 9M83 missiles and eight 9M82 SAMs.

The ADMS technical support facilities include:

- maintenance and repair assets for all the elements of the ADM system, as well as automated integrated missile test and monitoring system;
- missile TLC short-term storage and transportation assets, as well as rigging equipment for missiles loading/unloading;
- training assets;
- a group set of spare parts, tools and accessories for all the elements of the ADM system.

S-300VM (ANTEY-2500)

Air Defence Missile System

Mission

The S-300VM (Antey-2500) air defence missile system is designed to protect task forces and vital national and military installations from mass attacks of medium range ballistic missiles, theatre/tactical ballistic missiles, aeroballistic and cruise missiles, strategic and tactical aircraft, as well as to engage AWACS-type aircraft, reconnaissance-and-strike air systems, loitering ECM aircraft, and other air attack assets.

The S-300VM ADM system is a long-range multi-channel mobile air defence system. It can provide effective non-strategic anti-missile and anti-aircraft defence. The system has efficient anti-jamming immunity and therefore is capable of engaging air targets in intensive electronic and fire counteraction environment, in any weather, by day and night.

Basic specifications	
Max target detection range, km	up to 250
Aerodynamic target engagement envelope, km:	
range	up to 200
altitude	0.025 – 30
Max target speed, m/s	4,500
Target radar cross section, sq.m	0.02 and over
Max hostile ballistic missile launch range, km	2,500
Number of simultaneously engaged targets	up to 24
Number of simultaneously guided missiles	up to 48
Reaction time, sec	7.5
Deployment/out-of-action time, min	5
ADMS continuous operation time, hrs	up to 48

Composition

A typical S-300VM ADMS includes:
- target detection and designation unit;
- up to four SAM systems;
- missile and technical support assets.

The target detection and designation unit includes:
- 9S457ME command post;
- 9S15M2 (or 9S15MT2E, 9S15MV2E) all-round surveillance radar;
- 9S19ME sector-surveillance radar.

Each SAM system includes:
- 9S32ME multi-channel missile guidance radar;
- up to six 9A84ME launchers with up to four 9M83ME missiles in transport-launch containers;
- up to six launcher/loader vehicles assigned to each launcher. One LLV mounts up to two 9M82ME missiles in TLCs.

Typically, one SAM system includes six launchers and three LLVs.

The missile and technical support assets of the SAM system include:
- maintenance and repair assets for all the elements of the system, as well as integrated functional testing system;
- missile TLC storage and transportation assets, as well as rigging equipment set for missiles loading/unloading;
- training assets;
- a set of spare parts, tools and accessories for all the elements of the SAM system.